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10/659,449	09/10/2003	Purva R. Rajkotia	SAMS01-00270	4890

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EXAMINER

MEHRPOUR, NAGHMEH

ART UNIT PAPER NUMBER

2617

DATE MAILED: 07/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/659,449

Applicant(s)

RAJKOTIA ET AL.

Examiner

Naghmeh Mehrpour

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 21 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1-30**, are rejected under 35 U.S.C. 103(a) as being unpatentable over Bae et al. (US Publication 2003/0193964 A1) in view of Wentink et al.(US Publication 2003/0231608 A1).

Regarding claims 1, 13, 25, Bae teaches use in a wireless communication system/apparatus comprising a plurality of base stations, each of which is capable of communicating with a plurality of mobile stations within a base station coverage area, an apparatus for setting up a call from a mobile station, wherein the apparatus comprises:

a base station that sets up said call from said mobile station by receiving an origination message from said mobile station (0046);

Bae teaches a MS transmits a Page Response Message to the BS in response to the Page Message. The Page Response Message contains a service option number indicating a service to be activated when the service is in the dormant state. The Page Message is intended here for the same use as initial service connection. The BS assigns forward and reverse traffic channels. The BS then transmits to the MS a Traffic Channel Assignment Message containing traffic

Channel assignment information and null data Upon receipt of the Traffic Channel Assignment Message, the MS establishes the forward and reverse traffic Channel checks reception of the forward traffic (i.e., null data), and transmits a preamble on the reverse traffic channel to the BS. The BS transmits a BS Acknowledgement Order to the MS. Thus, the forward and reverse traffic channels are completely established and the BS and the MS transition to an active state 20 (0034-0035).

Bae fails to teach wherein said base station sends null frames on a forward traffic channel to said mobile station to verify that said forward traffic channel is reliable instead of sending a base station acknowledgment order to said mobile station to verify that said forward traffic channel is reliable.

wherein said base station receives a traffic channel preamble from said mobile station on a reverse traffic channel to said base station to verify that said reverse traffic channel is reliable instead of receiving a mobile station acknowledgement order from said mobile station to verify that said reverse traffic channel is reliable.

However, Wentink teaches a station acknowledges the frame by transmitting acknowledgement frame 608 (e.g., null frame acknowledgement frame, etc.).

Bae discloses sending Null frame or ACK frame. Therefore, the Null frame can be send instead of Acknowledgement. Therefore, it would have been obvious to ordinary skill in the art at the time the invention was made to combine the above teaching of Wentink with Bae, in order to provide a method that each device in the network can continually monitor the quality of the media.

Bae further teaches Upon receipt of the traffic channel Assignment Message, the MS

establishes the forward and reverse traffic channel checks reception of the forward traffic (i.e., null data), and transmits a preamble on the reverse traffic channel to the BS in step 105. In step 106, the BS transmits a BS Acknowledgement Order to the MS. Thus, the forward and reverse traffic channels are completely established and the BS and the MS transition to an active state 20.

Regarding claims 2, 14, 26, Bae teaches a system/apparatus wherein: said base station sends to said mobile station a specified number of traffic channel preambles for said mobile station to send to said base station before said mobile station goes to a traffic channel (0034,0035, 0046).

Regarding claims 3, 15, Bae teaches an apparatus/system wherein said base station sends said specified number of traffic channel preambles to said mobile station in one of a channel assignment message and an extended channel assignment message (0034, 0035, 0046).

Regarding claims 4, 16, 27, Bae teaches an apparatus/system wherein said base station sends a mode of operation indicator to said mobile station to cause said mobile station to send a specified number of traffic channel preambles to said mobile station before said mobile station goes to a traffic channel, wherein said base station sends said mode of operation indicator to said mobile station in one of a channel assignment message and an extended channel assignment message (0034, 0035, 0046).

Regarding claims 5, 17, 28, Bae teaches an apparatus/system wherein:

said base station sends to said mobile station a specified number of traffic channel preambles for said mobile station to send to said base station before said mobile station goes to a traffic channel (0034-0035); and

said base station sends a base station acknowledgement order to said mobile station before said mobile station has sent the specified number of traffic channel preambles to said base station (0034-0035, 0045).

Regarding claims 6, 18, Bae teaches an apparatus/system wherein said base station sends said specified number of traffic channel preambles to said mobile station in one of a channel assignment message and an extended channel assignment message (0034-0035, 0046).

Regarding claims 7, 19, Bae teaches an apparatus/system wherein:

said base station sends a mode of operation indicator to said mobile station to cause said mobile station;

1) to send a specified number of traffic channel preambles to said mobile station before said mobile station goes to a traffic channel (page 2 section 0020), and

2) to enter a traffic channel when said mobile station receives a base station acknowledgement order from said base station before said mobile station has sent the specified number of traffic channel preambles to said base station (0034-0035,0046); and

wherein said base station sends said mode of operation indicator to said mobile station in one of a channel assignment message and an extended channel assignment message (0034-0035, 0046).

Regarding claims 8, 20, Bae teaches an apparatus/system wherein said base station sends a traffic channel preamble to said mobile station on a forward traffic channel after said base station has sent one of a channel assignment message and an extended channel assignment message to said mobile station, wherein said traffic channel preamble verifies that said forward traffic channel is reliable (0034-0035, 0046); and

said base station receives null frames/ACK from said mobile station on a reverse traffic channel after said base station has sent said traffic channel preamble to said mobile station, wherein said null frames/ACK verify that said reverse traffic channel is reliable (0034-0035, 0045). As mention in claim 1, Wentink teaches Null frame or Ack frame verify the transmission (see claim 1).

Regarding claims 9, 20, 29, Bae teaches an apparatus/system as set forth in claim 1 wherein: said base station sets up a call to terminate on said mobile station by sending null frames/ACK frame on a forward traffic channel to said mobile station to verify that said forward traffic channel is reliable instead of sending a base station acknowledgment order to said mobile station to verify that said forward traffic channel is reliable (0034-0035, 0044). As mention in claim 1, Wentink teaches Null frame or Ack frame verify the transmission (see claim 1).

Regarding claims 10, 22, 30, Bae fails teaches an apparatus/system as set forth in claim 9 wherein said base station sets up a call to terminate on said mobile station by receiving a traffic channel preamble from said mobile station on a reverse traffic channel to said base station to

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verify that said reverse traffic channel is reliable instead of receiving a mobile station acknowledgement order from said mobile station to verify that said reverse traffic channel is reliable. (see claim 1) .

Regarding claims 11, 23, Bae modified by Wentink fails to teach a apparatus/system wherein said base station sets up said call from said mobile station in approximately two hundred milliseconds. However, the examiner takes official notice that a apparatus/system wherein said base station sets up said call from said mobile station in approximately two hundred milliseconds is well known in the art. Therefore, it would have been obvious to ordinary skill in the art at the time the invention was made to combine the above teaching Wentink with Bae, in order to reduce the call setup time.

Regarding claims 12, 24, Bae modified by Wentink fails to teach an apparatus/system wherein said base station sets up said call to terminate on said mobile station in approximately three hundred milliseconds. However, the examiner takes official an apparatus/system wherein said base station sets up said call to terminate on said mobile station in approximately three hundred milliseconds is well known in the art. Therefore, it would have been obvious to ordinary skill in the art at the time the invention was made to combine the above teaching Bae with Wentink, in order to reduce the call setup time.

Response to Arguments

3. Applicant's arguments filed 4/21/06 have been fully considered but they are not persuasive.

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In response to applicant's argument that "Bae does not teach that the null data can be used instead of the BS acknowledgement order, which is required throughout Bae's description", is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Bae teaches use in a wireless communication system/apparatus comprising a plurality of base stations, each of which is capable of communicating with a plurality of mobile stations within a base station coverage area, an apparatus for setting up a call from a mobile station, wherein the apparatus comprises: a base station that sets up said call from said mobile station by receiving an origination message from said mobile station (0046); Bae teaches a MS transmits a Page Response Message to the BS in response to the Page Message. The Page Response Message contains a service option number indicating a service to be activated when the service is in the dormant state. The Page Message is intended here for the same use as initial service connection. The BS assigns forward and reverse traffic channels. The BS then transmits to the MS a Traffic Channel Assignment Message containing traffic Channel assignment information and null data. Upon receipt of the Traffic Channel Assignment Message, the MS establishes the forward and reverse traffic Channel checks reception of the forward traffic (i.e., null data), and transmits a preamble on the reverse traffic channel to the BS. The BS transmits a BS Acknowledgement Order to the MS. Thus, the forward and reverse

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traffic channels are completely established and the BS and the MS transition to an active state 20 (0034-0035). Bae fails to teach wherein said base station sends null frames on a forward traffic channel to said mobile station to verify that said forward traffic channel is reliable instead of sending a base station acknowledgment order to said mobile station to verify that said forward traffic channel is reliable, wherein said base station receives a traffic channel preamble from said mobile station on a reverse traffic channel to said base station to verify that said reverse traffic channel is reliable instead of receiving a mobile station acknowledgement order from said mobile station to verify that said reverse traffic channel is reliable. However, Wentink teaches a station acknowledges the frame by transmitting acknowledgement frame 608 (e.g., null frame acknowledgement frame, etc.). Bae discloses sending Null frame or ACK frame. Therefore, the Null frame can be send instead of Acknowledgement. Therefore, by combing the above teaching of Wentink with Bae, providing a method that each device in the network can continually monitor the quality of the media. Bae further teaches Upon receipt of the traffic channel Assignment Message, the MS establishes the forward and reverse traffic channel checks reception of the forward traffic (i.e., null data), and transmits a preamble on the reverse traffic channel to the BS in step 105. In step 106, the BS transmits a BS Acknowledgement Order to the MS. Thus, the forward and reverse traffic channels are completely established and the BS and the MS transition to an active state 20.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Bae teaches use in a wireless communication system/apparatus comprising a plurality of base stations, each of which is capable of communicating with a plurality of mobile stations within a base station coverage area, an apparatus for setting up a call from a mobile station, wherein the apparatus comprises: a base station that sets up said call from said mobile station by receiving an origination message from said mobile station (0046); Bae teaches a MS transmits a Page Response Message to the BS in response to the Page Message. The Page Response Message contains a service

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option number indicating a service to be activated when the service is in the dormant state. The Page Message is intended here for the same use as initial service connection. The BS assigns forward and reverse traffic channels. The BS then transmits to the MS a Traffic Channel Assignment Message containing traffic Channel assignment information and null data. Upon receipt of the Traffic Channel Assignment Message, the MS establishes the forward and reverse traffic Channel checks reception of the forward traffic (i.e., null data), and transmits a preamble on the reverse traffic channel to the BS. The BS transmits a BS Acknowledgement Order to the MS. Thus, the forward and reverse traffic channels are completely established and the BS and the MS transition to an active state 20 (0034-0035). Bae fails to teach wherein said base station sends null frames on a forward traffic channel to said mobile station to verify that said forward traffic channel is reliable instead of sending a base station acknowledgment order to said mobile station to verify that said forward traffic channel is reliable, wherein said base station receives a traffic channel preamble from said mobile station on a reverse traffic channel to said base station to verify that said reverse traffic channel is reliable instead of receiving a mobile station acknowledgment order from said mobile station to verify that said reverse traffic channel is reliable. However, Wentink teaches a station acknowledges the frame by transmitting acknowledgement frame 608 (e.g., null frame acknowledgement frame, etc.). Bae discloses sending Null frame or ACK frame. Therefore, the Null frame can be send instead of Acknowledgement. Therefore, by combing the above teaching of Wentink with Bae, providing a method that each device in the network can continually

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monitor the quality of the media. Bae further teaches Upon receipt of the traffic channel Assignment Message, the MS establishes the forward and reverse traffic channel checks reception of the forward traffic (i.e., null data), and transmits a preamble on the reverse traffic channel to the BS in step 105. In step 106, the BS transmits a BS Acknowledgement Order to the MS. Thus, the forward and reverse traffic channels are completely established and the BS and the MS transition to an active state 20.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. **Any responses to this action should be mailed to:**

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Naghmeh Mehrpour whose telephone number is 571-272-7913. The examiner can normally be reached on 8:00- 6:00.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nick Corsaro be reached (571) 272-7876.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NM

July 4, 2006


MELODY MEHROUR
PATENT EXAMINER